

U. S. Steel 600 Grant Street Pittsburgh, PA 15219-2749 Fax: 412 433 2811

April 3, 1995

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U.S. Environmental Protection Agency
841 Chestnut Building
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Allegheny County Bureau of
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Re: U.S. Steel Clairton Works

Dear Bill and Charlie:

As indicated during our conference call on January 26, U.S. Steel had anticipated receiving a report from its consultant by early to mid-March. Unfortunately, completion of that report is taking longer than anticipated.

Enclosed for your information is a copy of a letter from Ron McCollum to Michael loff and Roger Westman informing them of the status of this matter, including the interim steps which have been taken.

Sincerely,

Stephan K. Todd

Encl.





U.S. Steel Clamon Works 400 State Street Clamon, PA 15025-1855

March 27, 1995

Mr. Michael Ioff
U. S. Environmental Protection Agency
Region III
Air, Radiation and Toxics Division
841 Chestnut Building
Philadelphia, PA 19107

Roger Westman
Allegheny County Health Department
Department of Air Quality
301 Thirty-ninth Street
Pittsburgh, PA 15201

SUBJECT:

Technical Report

U. S. Steel Clairton Works Coke Oven Gas Venting

Dear Mr. Ioff:

In a conference call on January 26, 1995 U. S. Steel agreed to submit the results of a consultant's investigation of the Clairton coke battery igniter pilot system. Completion of the report has been delayed because a key engineer at ChemTech (the system designer) was unavailable and the scope of ChemTech's work has been increased. ChemTech's work is now underway and their final report is now expected by mid-May.

In the interim, two significant changes have been made to improve pilot reliability:

- A new coke oven gas line, consisting of approximately 900 lineal feet of stainless steel pipe has been installed to provide a more reliable, clean, and dry during the week of March 20.
- 2. Air flow has been readjusted to improve flame stability.

Also, installation of test ports on two selected flares to obtain field data for ChemTech evaluation is underway.

ChemTech will be working as part of a team consisting of Operations (Clairton Coking and Chemicals), Engineering and ChemTech Consultants, Inc. which will evaluate the flare pilot operation and recommend improvements for reliability.



## ChemTech's current tasks are:

- 1. Develop calculated curves showing optimum and range of operability of the pilots relating to gas pressure, gas flow, air flow, % fuel in air and total O<sub>2</sub> available for combustion.
- 2. Analyze the system gas flow with and without gas flow orifice and comparison to the vendor data.
- 3. Collect field data on pressures and O2 concentrations downstream of the pilot venturi.
- 4. Investigate air filter options and air flow throttling devices.
- 5. Calculate and test rangeability of natural gas as a back-up pilot fuel.
- 6. Investigate use of a parallel power tie-in source for pilot lighting.
- 7. Verify field piping systems for use in system analysis and training.

We now expect that the ChemTech report will be available for distribution by May 19.

If you have any questions, please call me at (412) 233-1101.

Sincerely,

H. R. McCollum

Manager Environmental Control Department

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cc: Steve Todd